

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim1 (Canceled).

Claim 2 (Original): A modulating apparatus for optical communication which modulates a carrier by a modulation signal and generates a modulated wave to be supplied to a light emitting diode, wherein modulation is executed to satisfy:

$$f_d > f_l,$$

$$f_u < f_2, \text{ and}$$

$$f_c > 3(1 + \alpha) f_{sr}/2$$

when a lower limit frequency of a use-permitted frequency band is f_l [Hz], an upper limit frequency of the use-permitted frequency band is f_2 [Hz], a carrier frequency is f_c [Hz], a rolloff factor is α , and a symbol rate of the modulation signal is f_{sr} .

Claims 3 and 4 (Canceled).

Claim 5 (Original): A transmitting apparatus comprising:

a modulating apparatus for optical communication which modulates a carrier by a modulation signal and generates a modulated wave to be supplied to a light emitting device, wherein modulation is executed to satisfy:

$$f_d > f_l,$$

$$f_u < f_2, \text{ and}$$

$$f_c > 3(1 + \alpha) f_{sr}/2$$

when a lower limit frequency of a use-permitted frequency band is f_l [Hz], an upper limit frequency of the use-permitted frequency band is f_2 [Hz], a carrier frequency is f_c [Hz], a rolloff factor is α , and a symbol rate of the modulation signal is f_{sr} ; and

a light transmitting unit having the light emitting device which is driven by the modulated

wave generated by the modulating apparatus and outputs a light-modulated wave.

Claim 6 (Canceled).

Claim 7 (Original): A computer program embodied on a computer-readable medium ~~product~~ for making a computer function as a modulating apparatus, by executing the computer program, for optical communication which modulates a carrier by a modulation signal and generates a modulated wave to be supplied to a light emitting device, wherein modulation is executed to satisfy:

$$f_d > f_1,$$

$$f_u < f_2, \text{ and}$$

$$f_c > 3(1 + \alpha) f_{sr}/2$$

when a lower limit frequency of a use-permitted frequency band is f_1 [Hz], an upper limit frequency of the use-permitted frequency band is f_2 [Hz], a carrier frequency is f_c [Hz], a rolloff factor is α , and a symbol rate of the modulated signal is f_{sr} .